Work Order ID 88949 Saturday, August 11, 2012 12:41:04 PM				*889		Page 1					
Item ID: Revision ID:	D350-591-121			Accept	*N90	იი4ი	1100)* ፡	Setup Sta	rt *N	S1*
		oty: 4.00 Qty: 4.00	/ -		Cust Iter Custome			Sto	^{pp} *N	S2*	
Reference: Approvals:	Process Plan:		ι	3 13 Tooling:	··	Date:		I	Run Sta Sto	1/1	R1*
	QC:	— · · · -	Date:	SPC (Y/N):		Date:			510	* *N	R2*
Sequence ID/ Work Center II	Operati Descrip			Set Up/ Run Hours	Tool IE	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr	· į				 				- (unitoti	
D2351	Rev E		16	0A01					•		
*100 *100* DC Document Control	DOCUME	NT CONTROL Memo Photocopy blu	efile and type label	0.00 15 0.00 15 0.00 1 1 1 1 1 1 1 1 1 1		· - · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	3	A) a	or Mr	J 12-11-
110 : [«] «﴿				0.00					 .	((2)
110 Large Fab	Large Fab	Memo		0.00				4	P		A.
Large Fab			16 extrusion to 55. 3185-G	32" long as per Dwg D2351 us	sing cutting			/	/		12.10.23
		2-Drill extrusio	n per Dwg D2351	using Jig DT8230 for rivets.							
		3-Deburr								:	. '
<i>f</i>											

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44 CM

Work Orde Saturday, Augus				*88949*							Page 2
Item ID: Revision ID: Item Name:	D350-591-			Accept	*N900040	100	*	Setup	Start Stop		S1* S2*
Start Date: Required Date: Reference:	8/14/2012 Start Qty: 4.00 8/24/2012 Req'd Qty: 4.00				Cust Item ID: Customer:					IV	
Approvals:	Process P	lan:		Tooling: SPC (Y/N):	Date:			Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center II		Operation Description		Set Up/ Run Hours	Tool ID Tool #		Accept Qty	Rej Qty		Reject Number	Insp. Stamp
120 CNC Bend 1 CNC Delta 100 Bend	ler	BENDING MACHINE - Memo Bend as per Program D2:		0.00 NC Bender 1 and Folio F1	1011. Use Bend — DC /2	10/29		<u></u> ,			
130 *130*		QC5- Inspect part comple	eteness to step on W/O	0.00		ic C		12	, ' ~ /	0-1	29
QC Quality Control		Memo		0.00			<u>.</u>	_ /	·		
¹⁴⁰ *1∆∩ *		Large Fab		0.00	e e		3	ค	<i>(</i>		0f
Large Fab		Memo 1-Bevel Fwd	and Aft end for welding	0.00		_	<u> </u>	_ <u>-</u> Y	·		12.10

2-Weld Aft End Bracket per QSI 004 & Dwg D2351 using Welding Jig DT8033 A/RAluminum Rod

3-Do not Grind Flush 122431

1-Bevel Fwd and Aft end for welding

Large Fab

Work Orde Saturday, Augus						Page 3					
Item ID: Revision ID: Item Name:	D350-591-1			Accept	*N900	040	10) *	Setup Sta	IVI	S1*
Start Date: Required Date: Reference:	8/14/2012	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item ID: Customer:					r ^N	S2*
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):		ate:			Run Sta Sto	1/1	R1*
Sequence ID/ Work Center II 150 *150* QC Quality Control)	Operation Description QC9- Inspect visual per	QSI004- Fusion Welds	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC Quality Control		QC5- Inspect part compl Memo	eteness to step on W/O	0.00 DAS 0.00 15 12 10-3)			v	3		·	

0.00

0.00

3 Hara-11.1

170

170 HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

Memo

Work Ord Saturday, Augus				*88		Page 4				
Item ID: Revision ID:	D350-591-1	121		Accept	*N90004	010	N* :	Setup Start	*N:	S1*
Item Name:	Heli-Access-	Step, LH						Stop	*N!	S 2*
Start Date: Required Date: Reference:	8/14/2012 8/24/2012	Start Qty: 4.00 Req'd Qty: 4.00		4* 4*	Cust Item ID: Customer:				141	
Approvals:	Process Pl	an:	Date:	Tooling:	Date:	·	I	Run Start	" \(\) 1 \(\) 1	₹1*
	QC:		Date:	SPC (Y/N):	Date:			Stop	*NF	₹2*
Sequence ID/ Work Center II 180 *180* QC Quality Control)	Operation Description Odia Inspect Part Finish Memo		Set Up/ Run Hours 0.00	Tool ID Tool	# Plan Code	Accept Qty	•	Reject Number	Insp. Stamp
100 Large Fab		2-Weld Fwd	Ì	5] 004 & Dwg D2351			_3			SE 12.11.00
220 * 27 0* QC		3-Grind end of QC10- Inspect visual per of Memo	eap flush per dw QSI004- ground				<u> 3</u> v	12-11-2		0A\ 09

Quality Control

Work Orde Saturday, August				*88949*									
Revision ID:	D350-591-1			Accept	*N900040100*				Setup	Start Stop	1 13.	S1*	
	8/14/2012 Start Qty: 4.00 : 8/24/2012 Req'd Qty: 4.00		*4* *4*		Cust Item ID: Customer:					-	IV.	S2*	
	Process Plan:		Date:	0 =	Date:			Run		Start Stop	*NI	R1*	
	QC:	- · ·	Date:	SPC (Y/N):	Da	te:				этор	*NI	R2*	
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	
230		QC5- Inspect part comple	eteness to step on W/O	0.00				_				64	
230 QC Quality Control		Мето		0.00				<u>ئ</u> ر	.a-v	1- 2	·	09	
240 *740* HandFinish Hand Finishing		Chemical Conversion Co	at per QSI005 4.1	0.00				3X)	Ø	<u>/</u> 		M, -121	
-												M	
50 50		White Gloss(Ref:4.3.5.1)	per QSI005 4.3-Alum	0.00			1	7 11	1 /			////	
250 Powdercoat Powder Coating		Memo START TIM OVEN TEM FINISH TIM		0.00 <u></u>			3	XY	,			12/1	
N (22	378		PERATURE:										

Work Orde Saturday, Augus				*88949*							
Item ID: Revision ID:	D350-591-1	21		Accept	*N90004010	\(\right)* Setup	Start	*NS1*			
Item Name:	Heli-Access-	Step, LH					Stop	*NS2*			
Start Date: Required Date: Reference:	8/14/2012 Start Qty: 4.00 8/24/2012 Req'd Qty: 4.00		*4* *4*		Cust Item ID: Customer:						
Approvals:		an:		Tooling: SPC (Y/N):	Date:	Run	Start Stop	*NR1* *NR2*			
Sequence ID/ Work Center II 260)	Operation Description Wing Walk as per dwg Q	S1005 4 4 Batch /22	Set Up/ Run Hours	Tool ID Tool # Plan Code	• •	-	Reject Insp. Jumber Stamp			
260 HandFinish Hand Finishing		Memo	51003 4.4 Batch <u>r 979 (</u>	0.00		3.4_	B	P 12-11-5.			
²⁷⁰ * 27 0*		QC3- Inspect Part Finish		0.00 OAS		3					
QC Quality Control		Memo		0.00 J 5	3						
²⁸⁰ *クጸበ*		Pick Kit		0.00		3		(A/// -			
Packaging		Memo		0.00		<u> </u>		12/11/66			

Packaging

Work Ord Saturday, Augu				*88949*							
Item ID: Revision ID: Item Name: Start Date:	D350-591-1 Heli-Access- 8/14/2012		*4*	Accept	*N90004	010 () *	Setup Star Stop	14.21		
Required Date Reference:		Req'd Qty: 4.00	*4*		Cust Item ID: Customer:			## #%			
Approvals:		an:	Date:		Date:]	Run Star Stop	INKI		
Sequence ID/ Work Center I 290 *290* QC Quality Control	D	Operation Description QC4- 100% Inspect kits Memo	for completeness	Set Up/ Run Hours 0.00 0.00 15 17		# Plan Code	Accept Qty	Reject Qty	Reject Insp. Number Stamp		
300 *300* Packaging Packaging		Packaging Memo Identify and Location: PPP Rev:	pack for shipping as per	0.00 0.00 r PPP D350-591-121			30		12/11/75		
310 *310* QC Quality Control	·	QC21- Final Inspection -	- Work Order Release	0.00				12	11/8 40		

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		• 4
		•

Work Order ID:

88949

Parent Item:

D350-591-121

Parent Item Name:

Heli-Access-Step, LH

Start Date: 8/14/2012

Required Date: 8/24/2012

Start Qty: 4.00

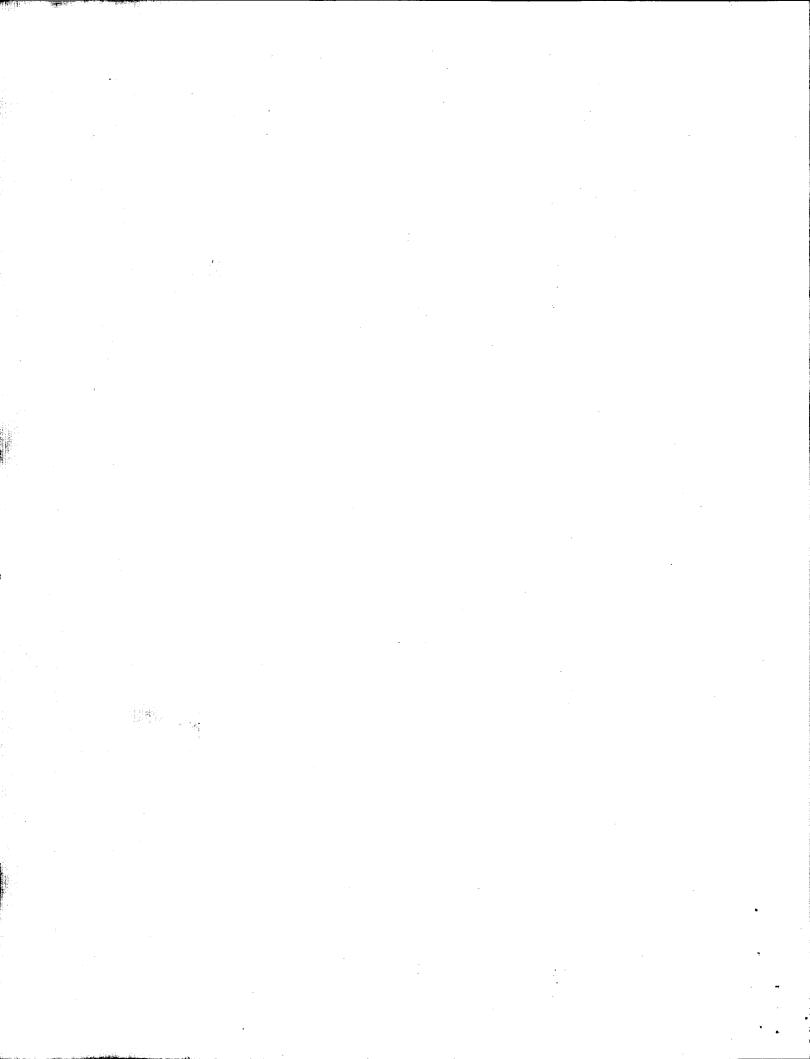
Required Qty: 4.00

Comments:

IPP Rev:E02.10.21Re-format; Incorporated D2351-041 IPPKJ/RF IPP rev. F 06.02.23 added grinding EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin *Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2244-116 Step Extrusion		Manufactured	No			110	Each	56.5000	0.5	2.1052632	41	1/2.	10.23
,	٠.			<u>Location</u> WA		Loc Qty 56.5		oc Code					
D2850-1 End Bracket		Manufactured	Ņo	6030 8080		54.5 140	Each	7.0000	1	4	161	, 2./0	.29
				Location WA016		Loc Oty 7	<u>Lo</u>	c Code					
D2582 Step Leg Assembly	·	Manufactured	No	7710	01	7	Each	2.0000	1	4	Il 10	2.//.	0/
				Location WA014_B7	76749	Loc Qty	<u>Lo</u>	<u>c Code</u>		3			
MS20600-AD4W3 Cherry Rivets		Purchased	No :	7282	28	190	Each	1,470.0000	16	64	Il.	2.	0/
				Location		I as Oto	-	. C. J.				•	

Location	Loc Oty	Loc Code	
311	582		
122452	582		6/8
ST314	284		
122151	284		
ST321	471		
111636	36		
117601	3		
118626	200	s Ž	
120308	232		
WA018	133	.	-
107939	133	į į	



Saturday, August 11, 2012 12:41:03 PM

Work Order ID:	88949								
Parent Item:	D350-591-121						Start	Date: 8/14/2012	Required Date: 8/24/2012
Parent Item Name:	Heli-Access-Step, L	.H						Qty: 4.00	Required Qty: 4.00
D2673-34 End Plate		Manufactured	No		210	Each	43.0000	1 4	1.
				Location	Loc Qty		Loc Code		1
				WA	43			40	
				84535	43			73	
NA-16A olt		Purchased	No		290	Each	127.0000	123352	20
5mp 34				Location	Loc Qty		Loc Code	يع ي هي ران الكليات	
J. 1				ST357	63				
				122416	63				
 -				ST358	64				
S				120498	14				
				121541	50				
2856=400 brasion Strip		Manufactured	No		290	f	202.4425	0.6	70
at (1) at 7.20"				Location	Loc Oty		Loc Code	es anno a marine de la companya de l	
- 131	1			ST403	96.998				
Sm3 3)	1			81875	96.998				
,				ST409	105.4445				
				63735	0.6696				
				68076	0.3149			-	
•				71164 86905	8.46 96			86905	
N960JD416	NAS1149D0463J	Purchased	No	00903	290	Each	29.0000		
asher		ruichased	110		290	Eacii	29.0000	12335	5 - JB 12/11/06
Sims 34				Location	Loc Oty		Loc Code		
- ' -/				ST351	29				
,				116289	8				
				119097	21				

Saturday, August 11, 2012 12:41:03 PM

Work Order ID: Parent Item: Parent Item Name:	88949 D350-591-121 Heli-Access-Step, Ll	Н							Date: 8/14/2012 Qty: 4.00	Required Date Required Qty	
D2230-0 Lug		Manufactured	No			290	Each	186.0000	89415	43 Upo	8/
5mß gy				Location ST480	84136	<u>Loc Oty</u> 186 186		Loc Code		-	
ANSETA Boli		Purchased	No			290	Each	417.0000	2	86~ JB	
5ms 3y					117619 119086	Loc Oty 417 4 413		Loc Code	119086		
MS2104213 Nut		Purchased	No		. 17000	290	Each	3,345.0000	123265	86/20	\$
Sms By				ST300	122452 117885	831 831 771 32		Loc Code		• •	
and Nidor Co.				ST317	119017 119075 122141	601 138 1743 1743					
ANHISA Bolt		Purchased	No			290	Each	1,123.0000	3	B J B	12/11/06 SI
Smb 3	\$ %			Location ST356	122416	Loc Oty 500 500		Loc Code	12246		8/
				1	20187 20770 21652 22063	623 19 12 588 4					

Saturday, August 11, 2012 12:41:03 PM

Work Order ID: Parent Item: Parent Item Name:

88949

D350-591-121

Heli-Access-Step, LH

Start Date: 8/14/2012

Required Date: 8/24/2012

Start Qty: 4.00

Required Qty: 4.00

MS21042L4 Nut		Purchased	No		290	Each	5,460.0000	123021	40	
				Location	Loc Qty		Loc Code		0	
	05.1			314	5000					
Sm>	37			122452	5000					
)			ST300	460					
				104248	1					
				116823	4					
				119075	116					
				121011	193					
4D443004				121444	146			3	;	
D2230:37 Lug 5m6	3X	Manufactured	No		290	Each	184.0000	89082	JB	The state of the s
3/1/10				Location	Loc Qty		Loc Code			
				ST472	184					
				84134	184					
D2732-030 Rubber Cushion		Manufactured	No		290	Each	42.0000	8 3560	- 2B	
cut (2) at 3.00"				Location	Loc Qty		Loc Code		0	
5mB 34				ST402	2					
3M3 3				84498	2					
				ST415	40					
				88776	40		8:0			
AN960JD10 Washer	NAS1149D0363J	Purchased	No		290	Each	0.0000	123248	JB_	12/11/06



DESIG	KE	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHEC	KED #	APPROVED	DRAWING NO. REV. E
	7/0	149	D2351 SHEET 1 OF 2
DATE			TITLE SCALE
05.1	11.14		HIGH FLOAT STEP ASSEMBLY NTS
Α		95.02.15	NEW ISSUE
В		97.05.22	END CAPS CHANGED
С		97.07.23	ADDED BUSHING AND FACING INFO
D		98.12.17	CHANGED TO BEND, D2850 REPLACES D2357 & D2358, INCORP. DEO 9084
Ε	_	05.11.14	UPDATE FINISHING NOTE

D2351 HIGH FLOAT STEP ASSEMBLY PARTS LIST

Part No.	Description	QTY -041	QTY -042
D2351-041	High Float Step Assembly (LH)	X	
D2351-042	High Float Step Assembly (RH)		Х
D2244-55.4	STEP EXTRUSION*	1	1
D2582	STEP LEG ASSEMBLY	1	1
D2673-34	STEP END PLATE	1	1
D2850-1	END BRACKET	1	
D2850-2	END BRACKET		1
MS20600AD4W3	RIVETS	16	16

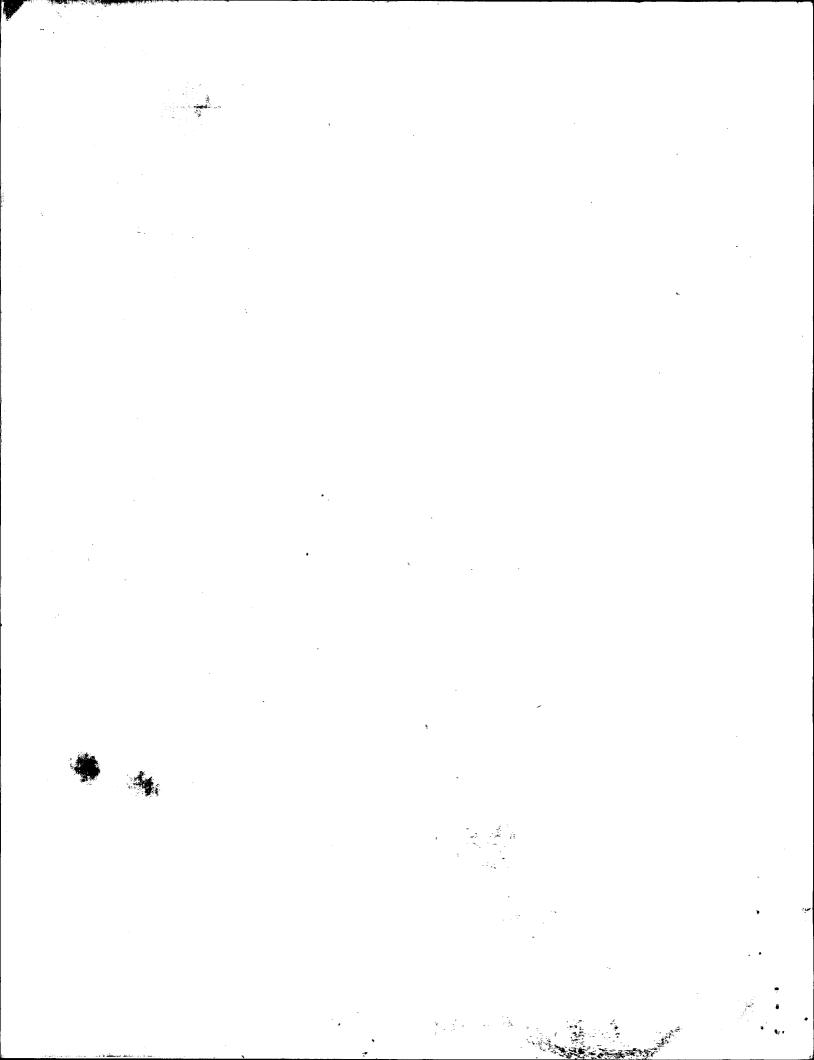
*cut per drawing

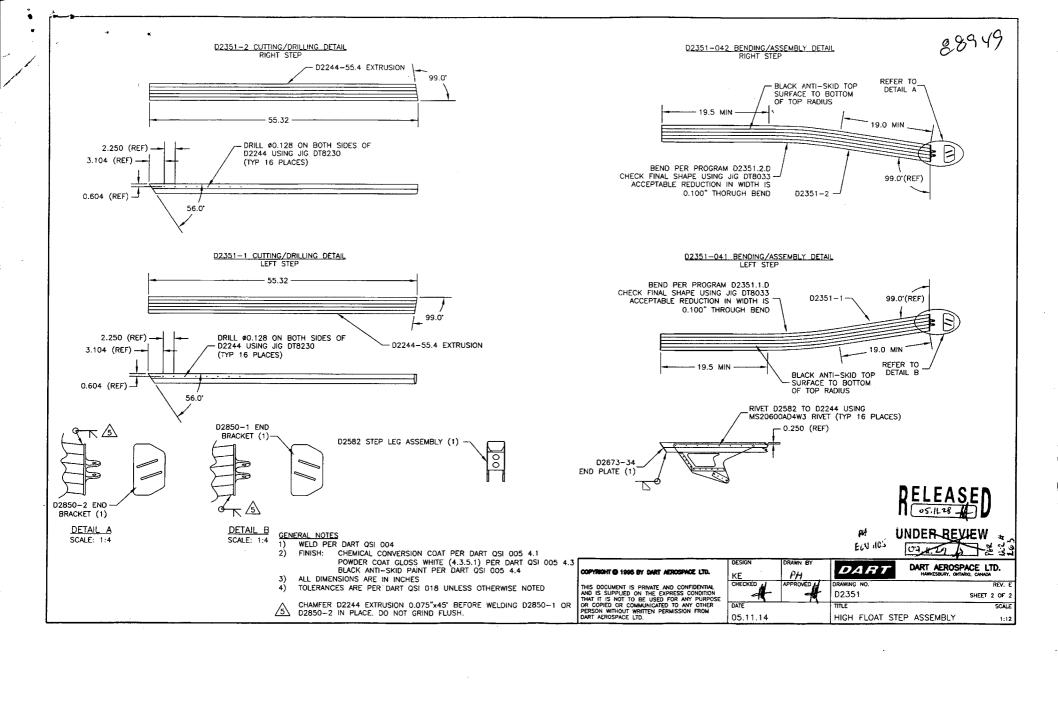
UNCONTROLLED COPY SUBJECT TO AMENDMENT ENGINEERING WITHOUT NOTICE SHOP COPY

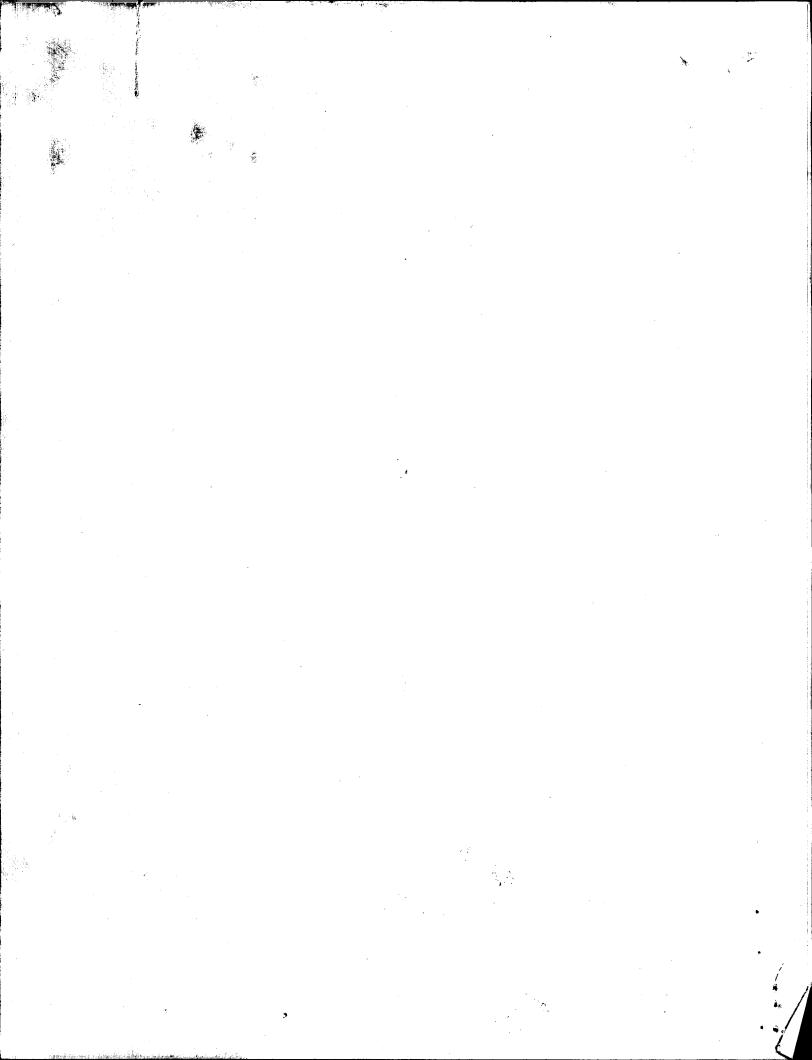


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D350-591 Page 22 of 23

5. PARTS LIST

Qty -111A	Qty -113	Qty -115	Qty -117A	Qty -119	Qty -133	Part Number	Description
Х						D350-591-111A	Heli-Access-Step ™, Long Step – High Skid
	X					D350-591-113	Heli-Access-Step ™, Short Step – High Skid
		Х				D350-591-115	Heli-Access-Step ™, Short Step – Low Skid
			Х			D350-591-117A	Heli-Access-Step ™, Pre-Flight Step
				х		D350-591-119	Heli-Access-Step ™, Long Step – Low Skid
					Х	D350-591-133	Heli-Access-Step ™, Aft Maintenance Step
						D0040	OTED ACCEMBLY ("COLLODED
	1					D2310	STEP ASSEMBLY (HIGH-SHORT)
1						D2311	STEP ASSEMBLY (HIGH-LONG)
		1				D2354	STEP ASSEMBLY (LOW-SHORT)
				1		D2355	STEP ASSEMBLY (LOW-LONG)
					11	D2946-041	STEP ASSEMBLY (MAINTENANCE)
4	2	2	2	2		D2171	CLAMP
4	2	2	2	2		D2182B035	CUSHION
					4	D2230-1	MOUNTING LUG
					4	D2230-3	MOUNTING LUG
8	4	4	4	4		D2274	RADIUS BLOCK
			1			D2362-041	SUPPORT BRACKET
2	1			1		D2362-3	SUPPORT BRACKET
		1				D2362-5	SUPPORT BRACKET
2	1	1	1	1	2	D2856-400-720	ABRASION STRIP
					1	D2945	MOUNTING PLATE
2	2	2		2		AN3-37A	BOLT
					2	AN4-7A	BOLT
					4	AN4-11A	BOLT
					8	AN4-14A	BOLT
		4				AN4-16A	BOLT
8	4	 		4		AN4-20A	BOLT
1	1	1	4	1		AN4-22A	BOLT
4	4	4		4		AN960JD10	WASHER
10	6	2	4	6	14	AN960JD416	WASHER
		4				AN960JD416L	WASHER
2	2	2		2		MS21042L3	NUT
9	5	5	4	5	14	MS21042L4	NUT

V 121)	Qty -122	Qty -123	Qty -124	Part Number	Description
Х				D350-591-121	Heli-Access-Step ™, Short Step – High Skid, LH
	Х			D350-591-122	Heli-Access-Step ™, Short Step – High Skid, RH
		Х		D350-591-123	Heli-Access-Step ™, Short Step – Low Skid, LH
			Х	D350-591-124	Heli-Access-Step ™, Short Step – Low Skid, RH
1				D2351-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1			D2351-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1		D2356-041	STEP ASSEMBLY (LOW-SHORT, LH)
			1	D2356-042	STEP ASSEMBLY (LOW-SHORT, RH)
			1	_D2230-1	MOUNTING LUG
===	1	1	1	-D2230-3	-MOUNTING EUG
I	== 1==	===		-D2856-400-720	-ABRASION STRIP
	2			-AN3-37A	BOLT
3	3	·	3	AN4-13A	BOLT
C 4==	=4	4	-4	-AN960JD10	*WASHER*
	_	= 6=	6-	AN960JD416	-WASHER-
	2;	2		-MS21042E3	NUT
3	3	3	-3-	-MS21042L4	-NUT

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Revision: **G**

Date: 08.10.06

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER AND

INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER

REF CANADIAN STC: SH92-6 REF FAA STC: SH967NE

For D350-591-121/-122/-123/-124/-133 steps, customers have the option of installing D2732-030 cushions under the D2230-1/-3 clamps to accommodate varying crosstube diameters and to improve fit. It is also acceptable to use longer or shorter AN4 bolts, and/or extra AN960JD416 washers under the nut to ensure 1.5 to 4 threads in safety. See Figure 1 on sheet 2 of this service instruction for reference.

For D350-591-121/-122 steps at CHG 005, D350-591-123/-124 steps at CHG 004, and D350-591-133 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

_Qty -121	Qty -122	Qty -123	Qty -124	Qty -133	Part Number	Description
X					D350-591-121	Heli-Access-Step ™, Short Step – High Skid, LH
	X				D350-591-122	Heli-Access-Step ™, Short Step - High Skid, RH
		X			D350-591-123	Heli-Access-Step ™, Short Step - Low Skid, LH
			X		D350-591-124	Heli-Access-Step ™, Short Step - Low Skid, RH
				X	D350-591-133	Heli-Access-Step ™, Aft Maintenance Step
√€2	2-2-	2	 2	-8-	*D2732-030-	CUSHION
2	2=	=2=	~_2	8	-AN4=16A	BOH=

The DSI-9459-011 kit is available for customers with earlier model D350-591-121/-122/-123/-124 steps. Longer AN4 bolts are provided to fasten the clamps. The DSI-9459-013 kit is available for customers with earlier model D350-591-133 steps.

Qty -011	Qty -013	Part Number	Description
X		DSI-9459-011	Rubber Cushion Kit (for -121/-122/-123/-124 steps)
	X	DSI-9459-013	Rubber Cushion Kit (for -133 steps)
2	8	D2732-030	CUSHION
2	8	AN4-16A	BOLT

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

BY: D. SHEPH#RD (DE # 02)

DATE: 09.06.24 CERT. NO.: SH92-6 ISSUE NO.: 11

В	AN4-16	6A WAS -17A F	FOR -013/-133 KIT	CP	09.06.24			
Α	NEW IS	SSUE		CP	09.04.17			
REV.			DESCRIPTION	BY	DATE			
DESIGN		47	DART AEROS	PACE	LTD			
DRAWN		9	HAWKESBURY, ONTARIO, CANADA					
CHECKE	D	PH	DRAWING NO.		REV. B			
MFG. AF	PPR.	NA	DSI 9459 SHEET 1 C					
APPRO\	/ED	1,1,1,2	TITLE		SCALE			
DE APPR.			OPTIONAL CLAMP MODIFICATIONS NTS					
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